

66. (New) The etching composition according to claim 64, wherein the ratio is in a range of about 1:1:25 (mineral acid:peroxide:deionized water) to about 1:1:10 (mineral acid:peroxide:deionized water).

67. (New) The etching composition according to claim 64, wherein the mineral acid is selected from the group consisting of HCl, HNO₃, H₂SO₄, H₃PO₄, and HF.

68. (New) An etching composition, the composition comprising a mineral acid, a peroxide, and deionized water at a ratio in a range of about 1:1:35 (mineral acid:peroxide:deionized water) to about 1:1:5 (mineral acid:peroxide:deionized water), wherein the composition has an etch rate greater than about 1000 Å/minute for cobalt.

69. (New) The etching composition according to claim 68, wherein the mineral acid is HCl.

70. (New) The etching composition according to claim 68, wherein the peroxide is hydrogen peroxide.

71. (New) The etching composition according to claim 68, wherein the ratio is in a range of about 1:1:25 (mineral acid:peroxide:deionized water) to about 1:1:10 (mineral acid:peroxide:deionized water).

72. (New) The etching composition according to claim 68, wherein the composition has an etch rate of about 50 Å/minute to about 250 Å/minute for metal nitride.

73. (New) An etching composition, the composition comprising a mineral acid, a peroxide, and deionized water at a ratio in a range of about 1:1:35 (mineral acid:peroxide:deionized water) to about 1:1:5 (mineral acid:peroxide:deionized water), wherein the composition has an etch rate of about 50 Å/minute to about 250 Å/minute for metal nitride.

Sub
F. cont
H. cont
cont'd

74. (New) The etching composition according to claim 73, wherein the mineral acid is HCl.

75. (New) The etching composition according to claim 73, wherein the peroxide is hydrogen peroxide.

76. (New) The etching composition according to claim 73, wherein the ratio is in a range of about 1:1:25 (mineral acid:peroxide:deionized water) to about 1:1:10 (mineral acid:peroxide:deionized water).

77. (New) An etching composition, the composition comprising a mineral acid, a peroxide, and deionized water, wherein the composition has an etch rate of about 50 Å/minute to about 250 Å/minute for metal nitride and an etch rate greater than about 1000 Å/minute for cobalt.

78. (New) The etching composition according to claim 77, wherein the mineral acid is HCl and the peroxide is hydrogen peroxide.

79. (New) An etching composition, the composition comprising a mineral acid, a peroxide, and deionized water, wherein the composition has an etch rate of about 50 Å/minute to about 250 Å/minute for metal nitride.

80. (New) The composition according to claim 79, wherein the mineral acid is HCl and the peroxide is hydrogen peroxide.

81. (New) The etching composition according to claim 80, wherein the composition comprises a ratio in a range of about 1:1:35 (mineral acid:peroxide:deionized water) to about 1:1:5 (mineral acid:peroxide:deionized water).

82. (New) The etching composition according to claim 81, wherein the composition comprises a ratio in a range of about 1:1:25 (mineral acid:peroxide:deionized water) to about 1:1:10 (mineral acid:peroxide:deionized water).
83. (New) The composition according to claim 79, wherein the mineral acid is selected from the group consisting of HCl, HNO₃, H₂SO₄, H₃PO₄, and HF.
84. (New) An etching composition, the composition comprising a mineral acid, a peroxide, and deionized water, wherein the composition has an etch rate greater than about 1000 Å/minute for cobalt.
85. (New) The composition according to claim 84, wherein the mineral acid is HCl and the peroxide is hydrogen peroxide.
86. (New) The etching composition according to claim 85, wherein the composition comprises a ratio in a range of about 1:1:35 (mineral acid:peroxide:deionized water) to about 1:1:5 (mineral acid:peroxide:deionized water).
87. (New) The etching composition according to claim 86, wherein the composition comprises a ratio in a range of about 1:1:25 (mineral acid:peroxide:deionized water) to about 1:1:10 (mineral acid:peroxide:deionized water).
88. (New) The composition according to claim 84, wherein the mineral acid is selected from the group consisting of HCl, HNO₃, H₂SO₄, H₃PO₄, and HF.
89. (New) An etching composition, the composition consisting essentially of a mineral acid, a peroxide, and deionized water, wherein the composition has an etch rate of about 50 Å/minute

Amendment and Response

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For: COMPOSITION FOR SELECTIVELY ETCHING AGAINST COBALT SILICIDE (As Amended)

to about 250 Å/minute for metal nitride and an etch rate greater than about 1000 Å/minute for cobalt.

90. (New) The composition according to claim 89, wherein the mineral acid is HCl and the peroxide is hydrogen peroxide.

91. (New) The composition according to claim 90, wherein the composition comprises a ratio in a range of about 1:1:35 (mineral acid:peroxide:deionized water) to about 1:1:5 (mineral acid:peroxide:deionized water).

92. (New) The composition according to claim 91, wherein the ratio is in a range of about 1:1:25 (mineral acid:peroxide:deionized water) to about 1:1:10 (mineral acid:peroxide:deionized water).

93. (New) The composition according to claim 89, wherein the mineral acid is selected from the group consisting of HCl, HNO₃, H₂SO₄, H₃PO₄, and HF.
